

Air-Hydraulics Booster Systems
Models: B-250, B-300, B-400 and B-500

Air-Hydraulics, Inc. designs, manufactures and sells a fluid power intensifying or booster system complete with a proprietary work cylinder and booster/intensifier. This system employs common shop air (60 to 100 psi), as the input or power source. The output is low-pressure hydraulics, which is commonly used to power its proprietary air over oil hydraulic work cylinder. This system can create forces up to 15 tons from the start of the stroke, continuing throughout the 6.00" plus stroke or travel of the cylinder. The system is self bleeding, in the unlikely event air may work its way into the closed hydraulic circuit. This system is NOT your typical fluid power intensifier! It gives full force throughout the entire stroke of the cylinder, unlike other in-line intensifier cylinders or other intensifiers.



This system is ideal for machine tool builders that need to use a hydraulic cylinder, but don't have space or money to use a hydraulic power unit and the electrical apparatus, which must accompany the power unit. It's ideal when requiring a smooth stroke and force that a hydraulic cylinder offers, but wanting to avoid falling under customer's hundreds of pages of hydraulic specifications. The system is pneumatically powered, where specifications are much easier to meet. There is no contending with noisy motors, leaky hydraulic tanks or pumps, drip pans and heat issues with coolers. This quiet running system uses less energy than a hydraulic unit, utilizing only shop air when cycling. Plus, there is no noise or air consumed when this system is sitting idle.

Sizing is easy with four intensifying systems - 2 ½ tons, 5 ½ tons, 10 tons and 15 tons capacities rated all at 100 psi. Just like pneumatics, the force can be adjusted by the turn of a regulator knob, which can be located for easy accessibility. No more reaching into the power unit to adjust the relief valve. The stroke of the cylinder varies, from 4" to 6", depending on the system purchased. Additional stroke or shorter stroke work cylinders are available, upon request.

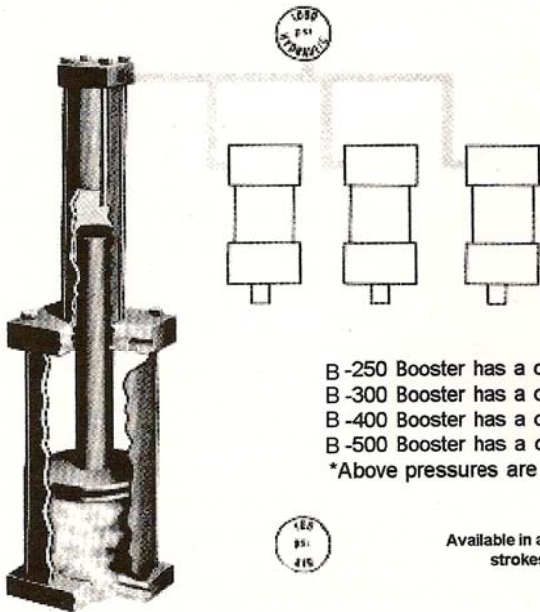
Model #:	Description	Force @ 100 psi
B-250	Intensifier System, 2 ½ tons, 5-3/16" Stroke, ¾" NPT ports.	5,000
B-300	Intensifier System, 5 ½ tons, 6.0" stroke, ¾" NPT ports.	11,000
B-400	Intensifier System, 10 tons, 4.0" stroke, ¾" NPT ports.	20,000
B-500	Intensifier System, 15 tons, 6.0" stroke, ¾" NPT ports.	30,000

The system comes complete with an easy to mount booster cylinder, a work cylinder with a double ended rod employing a 2" precision adjustable down stop, 4 ft. of flexible hydraulic and pneumatic hose, a hydraulics flow control valve, to adjust the speed of the work cylinder and fittings, completely assembled, ready to install. All that is required is an air preparation system, which includes a filter, regulator and lubricator (F-R-L) and air directional spool valve, 2 or 3 position (*if 3-position, it must be closed centered*), 4/5 way, electric or pneumatic, with an adequate volume of air flow.



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BOOSTER/INTENSIFIER

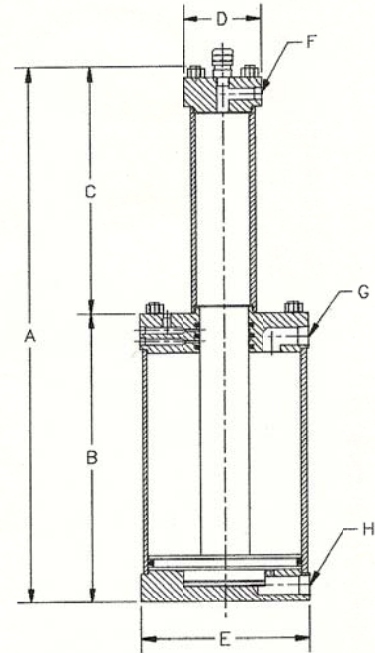


C-300 BOOSTER...Vertical

B-250 Booster has a capacity of 35 cu. in. of oil at 759 psi
 B-300 Booster has a capacity of 75 cu. in. of oil at 1023 psi
 B-400 Booster has a capacity of 51 cu. in. of oil at 1023 psi
 B-500 Booster has a capacity of 167 cu. in. of oil at 1363 psi
 *Above pressures are based on 100 lbs air line pressure.

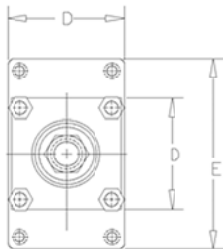


Available in a wide selection of bore combinations, strokes, and output volume capacities



BOOSTER OR INTENSIFIER SPECIFICATIONS

SIZE	PIPE THREAD SIZE								I.D.	Rod Dia.	Stroke	Shpg. Wt
	A	B	C	D	E	F	G	H				
B-250	28-1/4	14-3/4	13-1/2	3-1/2	6-3/4	1/2	3/4	3/4	6"	2-1/8"	10-1/4"	75 LBS.
B-300	38-3/4	20	18-3/4	4	9	1/2	3/4	3/4	8"	2-1/2"	15-5/8"	100 LBS.
B-400	44-1/8	23-1/16	21-1/16	4	9	1/2	3/4	3/4	8"	1-7/8"	18-1/2"	125 LBS.
B-500	48-1/16	25	23-1/16	5-1/2	12-3/4	1/2	3/4	3/4	12"	3-1/4"	20-1/16"	125 LBS.

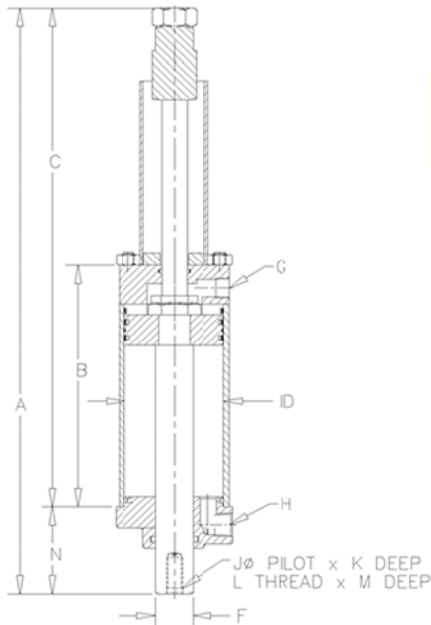


WORK CYLINDER SPECIFICATIONS

SIZE	A	B	C	D	E	F
B-250	20.75	8.75	17.75	4.00	7.00	3.00
B-300	23.88	9.81	20.31	4.50	7.75	3.50
B-400	19.88	7.81	16.31	4.50	7.75	3.50
B-500	24.88	10.43	20.62	6.75	10.25	4.25

	PIPE THREAD		ROD MOUNT			
	G	H	J	K	L	M
B-250	1/2	3/8	.625	.25	5/8-11	1.50
B-300	1/2	1/2	.625	.25	5/8-11	1.50
B-400	1/2	1/2	.625	.25	5/8-11	1.50
B-500	3/4	3/4	1.25	.25	1 1/4-12	1.75

	STROKE	ID
B-250	5.19	3.0
B-300	6.0	4.0
B-400	4.0	4.0
B-500	6.0	5.75



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